

REMARKS

Claims 1, 2, 6, 12-16 and 21-32 are pending. Claims 1, 12, 13, and 15 have been amended.

Claims 1, 2, 6, 12-16, 21 and 24-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kamiya (U.S. Patent No. 5,809,335) in further view of the applicants admitted prior art (AAPA). Applicants submit that the present claims are patentable over Kamiya in view of the AAPA and traverse the rejections.

Kamiya in claim 1 (col. 8), as cited by the Examiner, discloses an interruption of a lower priority DMA data transfer by a higher priority data transfer. The number N of data items to be transferred at the time of the interrupt is stored in backup memory (col. 4, lines 60-64). The lower priority transfer is restored (N is restored) and resumes to transferring the remainder of the lower priority data after the higher priority data transfer is complete (Kamiya col. 6 line 53 to col. 5, line 6. Hence when the interrupt occurs Kamiya does not disclose not teach resetting N to zero nor restarting from the beginning the lower priority transfer after the interrupt has been processed. Kamiya, teaches away from retransmission from the beginning because the remaining N is always stored in Kamiya.

Claim 1 of the present invention recites, among other features, the DMA controller terminating a DMA transfer and clearing a current transfer counter before a terminal count is reached upon receiving an early termination request signal from the I/O device. This is supported by FIG. 7 and line 19, page 14 to line 7 of page 15 of the specification. As Kamiya neither discloses nor suggest this feature, for this reason alone claim 1 should be allowable over Kamiya.

In addition Applicant's request a reference on Examiner's motivation to combine Kamiya with the AAPA. The motivation given in the Office Action mailed on May 15, 2004 at paragraph 4 is that the combination of the termination of Kamiya with the

I/O devices of the AAPA creates a system that is compatible with known device types and competitive in a modern computer place. This alleged motivation is insufficient because it is merely a broad, conclusory statement. As the alleged motivation lacks clear and particular reasons that would lead one of ordinary skill in the art to combine specific teachings of AAPA with Kamiya, Applicants request a reference or other evidence. Otherwise Applicants request the withdrawal of the obviousness rejection of claim 1.

Claims 2 and 24-28 depend from claim 1 and include additional features. Therefore, claims 2 and 24-28 are also patentable over Kamiya in view of the AAPA.

Claim 12 recites among other features: an input/output (I/O) device coupled to the DMA controller, wherein the DMA controller re-executes a DMA transfer from the beginning with the I/O device upon receiving a retransmit request signal from the I/O device. Claim 12 is supported by lines 1-12, page 14 of the specification. Kamiya discloses restarting the DMA transfer from point of interrupt and teaches away from re-executing the DMA transfer from the beginning. Thus, for this reason alone claim 12 should be allowable over Kamiya.

Claims 29-32 depend from claim 12 and include additional features. Therefore, claims 29-32 are also patentable over Kamiya in view of the AAPA.

For reasons similar to the above reasons for either claims 1 or 12, claims 13-16, and 21-23 should be allowable.

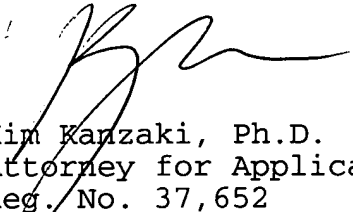
Applicants respectfully submit that the rejections have been overcome, and that the claims are in condition for allowance. Accordingly, applicants respectfully request that the rejections be withdrawn and the claims be allowed.

CONCLUSION

All claims should be now be in condition for allowance and a Notice of Allowance is respectfully requested.

If there are any questions, the applicants' attorney can be reached at Tel: 408-879-6149 (Pacific Standard Time).

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on September 13, 2004.

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